

The ADAS Workshop
9-11th December 2018
Physikzentrum, Bad Honnef, Germany

Sunday 9th December

19:00 Social Dinner

Monday 10th December

09:15 – 09:30 Martin O'Mullane
 Welcome, introduction of participants and agenda adoption.

Session 1: General reports and new perspectives

09:30 – 10:00 Oleksandr Marchuk
 Atom-atom collisions at plasma surface interface as the most natural mirror
 laboratory and application for ITER

10:00 – 10:30 Peter Bochsler
 Application of ADAS data for diagnostics of the solar wind

10:30 – 11:00 Diana Naydenkova
 COMPASS-upgrade and possible spectroscopic measurements

11:00 – 11:30 Coffee break

11:30 – 12:00 Adam Foster
 Atomic Data requirements for upcoming X-ray missions

12:00 – 12:30 Martin O'Mullane
 Intermediate coupling GCR population model

12:30 - 14:00 Lunch

Session 2: Molecules and Tungsten

14:00 – 14:30 Ewa Pawelec
 Molecular bands in JET plasma - modelling and experimental data

14:30 – 15:00 Ioan Schneider
 Electron-driven reactivity of molecular cations: H₂⁺, BeH⁺, CH⁺, ArH⁺ and He₂⁺

15:00 - 15:30 Aleksander Drenik
 Ammonia formation in N₂-seeded discharges at JET and ASDEX Upgrade

15:30 - 16:00 Coffee break

- 16:00 – 16:30 Stephan Ertmer
High resolving spectroscopy on high Z materials at the linear plasma device PSI-2
- 16:30 – 17:00 Alina Eksaeva
Validation of the new MS-resolved ADAS dataset for W by ERO2.0 simulation of spectroscopy at PSI-2 linear plasma device
- 17:30 – 18:00 Stuart Loch
Update on atomic data for neutral W for applications in high-Z PFCs.
- 18:15 - 18:45 Steering committee meeting (closed session)
- 19:00 Dinner

Tuesday 11th December

Session 2: Uncertainty in data and models

- 09:00 - 09:30 Kerry Lawson
D and He atomic physics data used in the EDGE2D code
- 09:30 - 10:00 Stuart Loch
Assigning uncertainties on fundamental atomic data
- 10:00 - 10:30 Simon Preval
Noble-Gas Recombination Rate Coefficients for use in modelling astrophysical, and magnetically confined fusion plasmas
- 10:30 - 11:00 Rémy Guirlet
tbc
- 11:00 - 11:30 Coffee break
- 11:30 – 12:00 Dmitriy Borodin
Atomic and molecular data needed for interpretation of plasma-surface interaction experiments
- 12:00 - 12:30 Yang Yang
W and Mo spectroscopy of EBIT relevant to Fusion plasma
- 12:30 - 13:00 Karol Koziol
Multi-Configuration Dirac-Hartree-Fock and Configuration-Interaction study of 4d-3p x-ray transitions in Cu- and Ni-like tungsten ions relevant to the diagnostic of high-temperature tokamak plasmas
- 13:00 - 14:30 Lunch

Final session: ADAS matters

14:30 - 15:30 Martin O'Mullane
Update on ADAS codes, new data, OPEN-ADAS and activities

15:30 - 16:30 All
General discussion on the role and future of ADAS/ADAS consortium in fusion.

End of workshop

Depart or Dinner at 19:00

Wednesday 12th December

9:00 Depart for seminar at Forschungszentrum Jülich.

11:00 Stuart Loch
Plasma spectral diagnostics for applications in fusion, astrophysical, and low temperature laboratory environments